



## **PS12U**

**2-Port USB 1-Port Parallel Internet Print Server**

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## **FCC Warning**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to subpart J of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which the user will be required to correct the interference at their own expense.

## **CE Mark Warning**

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## **VCCI Mark Warning**

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## **LIMITED WARRANTY**

Hawking Technology guarantees that every PS12U is free from physical defects in material and workmanship under normal use for two (2) years from the date of purchase. If the product proves defective during this two-year warranty period, call Hawking Customer Service in order to obtain a Return Authorization number. Warranty is for repair or replacement only. Hawking Technology does not issue any refunds. BE SURE TO HAVE YOUR PROOF OF PURCHASE. RETURN REQUESTS CAN NOT BE PROCESSED WITHOUT PROOF OF PURCHASE. When returning a product, mark the Return Authorization number clearly on the outside of the package and include your original proof of purchase. IN NO EVENT SHALL HAWKING TECHNOLOGY'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, ITS ACCOMPANYING SOFTWARE OR ITS DOCUMENTATION. Hawking Technology makes no warranty or representation, expressed, implied or statutory, with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. Hawking Technology reserves the right to revise or update its products, software, or documentation without obligation to notify any individual or entity. Please direct all inquiries to: [techsupport@hawkingtech.com](mailto:techsupport@hawkingtech.com)



# Step 1

**Check the requirements for installation**

Congratulations on your purchase of the Hawking PS12U Two Port USB + One Parallel Port 10/100M Internet Print Server. The Hawking P-S12U is a powerful and convenient way to connect your USB and parallel printers to a network. The PS12U has a 10/100Mbps auto-sensing port, allowing you to attach it to a 10BaseT or 100BaseTX network without the need for a dedicated PC print server. The PS12U also supports multiple servers and multiple protocols, providing you with the capability to print from anywhere, from any computer and from any application.

Please take the time now to check the contents of your package:

## **Package Contents**



PS12U Print Server



One CD-ROM



Quick Installation Guide



One power adapter

(Manual and Drivers)

# What you will need to get started

- One - Three Printers
- USB or Parallel Cables
- One Ethernet cable attached to your main network
- A computer client attached to your network

## Planning Your Print Server Network



# LED Indicators



The print server is equipped with three LED lights to assist in diagnosing print server or network errors.

## Status (Orange)

When the print server unit is powered on, the *Status* LED will flash up to five times as part of the unit's **Power On Self Test (POST)**. This indicates that the print server hardware is properly configured. This LED, however, may flicker whenever data is being transmitted and printed.

## 2 Link LEDs (Green)

This light will illuminate green if the PS12U detects a problem-free network connection.



## Hardware Installation

1. Connect the PS12U Print Server to a network.
2. Connect the PS12U Print Server to your printer(s).
3. Plug the AC power adapter into the power receptacle on the back side of the PS12U Print Server.

Check the LED's marked as **status** on the side of the Print Server. It should flash up to five times normally. If not, please contact your local dealer for repair or replacement.



## Step 3

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### **Install your PC Software**

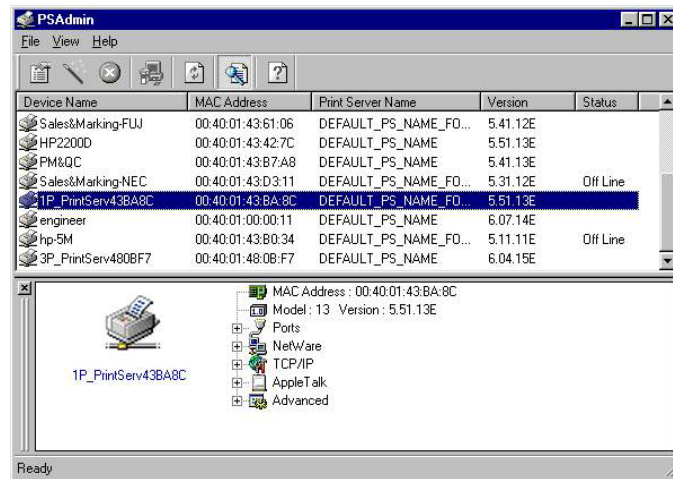
- 1) **POWER ON:** After you have correctly connected your router to your PC and Cable/DSL modem, please power on all units.
  
- 2) **INSTALL the PSAdmin Software:** To install PSAdmin, please follow the directions listed below.
  1. Insert the **Windows 95/98/Me/NT/2000/XP** Setup CD into your CD-ROM.
  2. Run the **setup.exe** from Windows 95/98/Me/NT/2000/XP. The **Network Print Monitor for Windows** welcome message will appear, then Click **Next**.
  3. The next dialog box will ask you where you would like to install PSAdmin. Please type in an installation directory or leave it in default and Click **Next**.




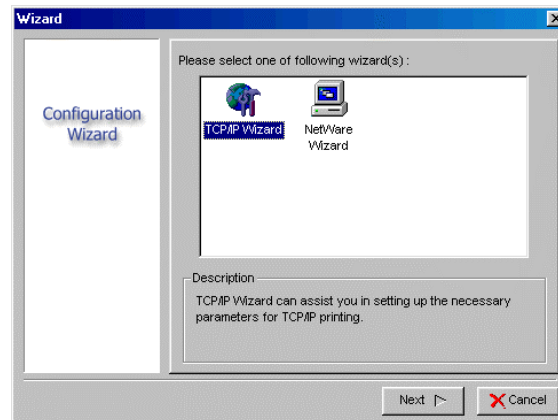
4. The Setup program will ask you to select installation files as described below:
  - a. ***Network Print Monitor:*** installs the Print server Windows Driver for Windows PC and IP Configuration utility.
  - b. ***PSAdmin:*** installs the Print server Windows utility for NetWare and IP Configuration utility.
5. Select “**PSAdmin**” and Click **Next**.
6. The Setup program will begin to copy files onto your local hard disk and automatically create the “**PSAdmin**” program for you.
7. Once the PSAdmin program is installed, you will need to run it in order to configure your PS12U Print Server.

## **Step 4** Configure your PC Software

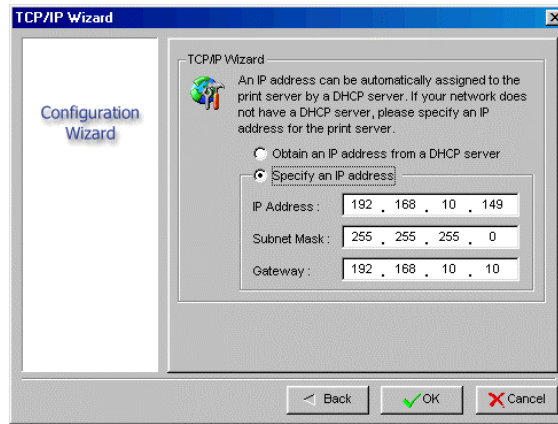
After PSAdmin is successfully installed, run the program by double-clicking the PSAdmin icon from “PSAdmin” program.



1. Click on the **Wizard** button <  > and select **TCP/IP Wizard**.



2. *(Optional)* For DHCP Settings, you may select “Obtain an IP address from DHCP server” if there is a DHCP server on your network. This option allows the print server to obtain IP-related settings automatically from your DHCP server. This setting, by default, is disabled. PLEASE NOTE: If you would like to use IPP printing, please configure your IP address manually. If you are manually specifying an IP address to the device, please skip to the next step.
3. In the IP Address option, type an IP address for the print server. The IP address must meet the IP addressing requirements of the network segment.




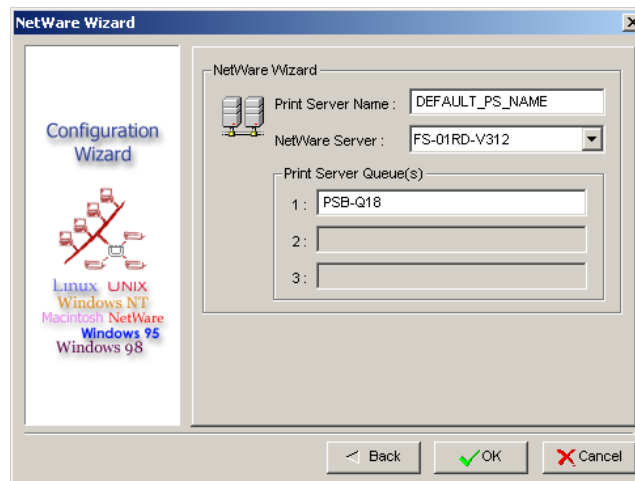
4. In the Subnet Mask option, type the Subnet Mask your LAN or network segment is currently configured to use.
5. *(Optional)* In the Gateway field, type the IP address of your LAN's gateway.
6. When done, click the OK button. The program will save the above settings into the print server's memory.
7. Congratulations! You have successfully configured your PS12U!

# NETWARE SETUP

## NetWare Wizard

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.

2. Click **Wizard** button  and select **NetWare Wizard**, as follow picture.



3. Select the NetWare File Server to which the print server device will be attached.
4. Type in a Print server.

5. Type in a Print Queue Names.

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**Note:** Each print queue corresponds to each print port of the print server.

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6. Click **OK**.
7. Done.
8. From your NetWare client computer, such as Windows 95/98/Me, create a printer that is connected (redirected) to one of the NetWare print queues serviced by the print server.


### **Manual Setup**

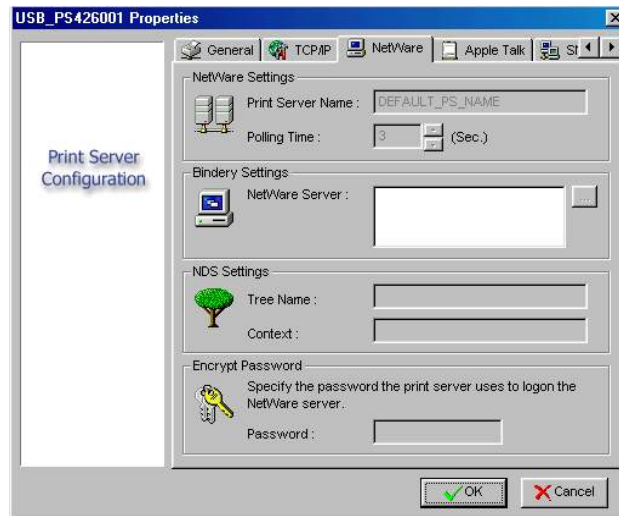
Manual Setup is a configuration program designed for more experienced users of NetWare. To setup the print server by using Manual Setup follow the steps:

1. Run PCONSOLE in NetWare 3.x or NetWare 4.x and create the necessary parameters (Refer to your Novell NetWare print

server/Services manual for details).

2. Log into your NetWare file server as a Supervisor (Admin.) or equivalent. From your Windows 95/98/Me, run PSAdmin.
3. Select the print server that you wish to configure.

4. Click **Properties**  in the tool bar and the following screen will appear.



5. Select **NetWare** and type in the Print server that created during PCONSOLE.

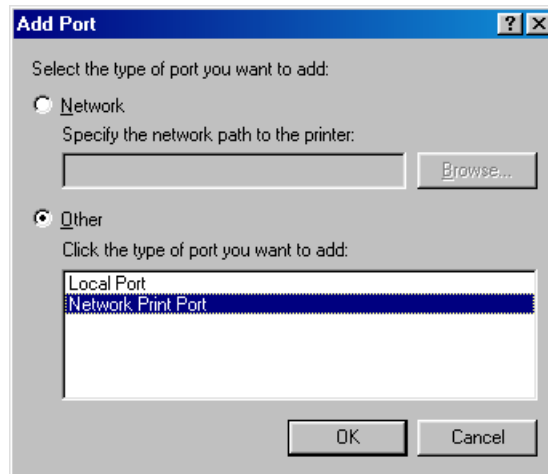
6. *(Optional)* In **Bindery Settings**, Select NetWare file server(s) that print server can do Bindery mode.
7. *(Optional)* In **NDS Settings**, Select NetWare file server(s), NetWare 4.x or later that print server can do NDS mode.
1. Click **OK**. From your NetWare client computer, such as Windows 95/98/Me, create a printer that is connected (redirected) to one of the NetWare print queues serviced by the print server.
2. Done.



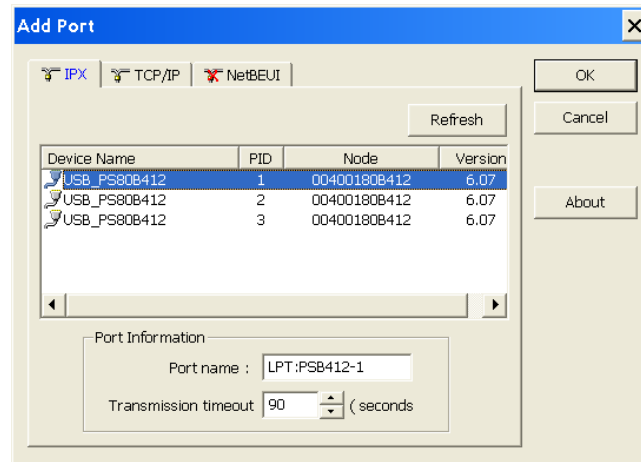
# Add Printers to Windows 95/98/Me

To attach your printers to the appropriate port through Windows 95/98/Me you must follow the installation steps below:

1. First click on the **Start** button, point your cursor to **Settings**, and select **Printers**.
2. Double-click the **Add Printer** icon.
3. Select **Local Printer** and click **Next**.
4. Select the appropriate printer manufacturer and printer type and click **Next**.
5. Select **LPT1** and click **Next**.
6. Type in the **Printer Name** and click **Next**.
7. A message reading, "After your printer is installed, Windows can print a test page so you can confirm that the printer is set up properly." Select **No** and click **Finish**.
8. Right-click the newly created **Printer Name** icon.
9. Select **Printer** and **Properties**.
10. Click on the **Details** tab and select **Add Port**.
11. In the **Add Port** dialog box, select **Other**, as shown in the following picture.



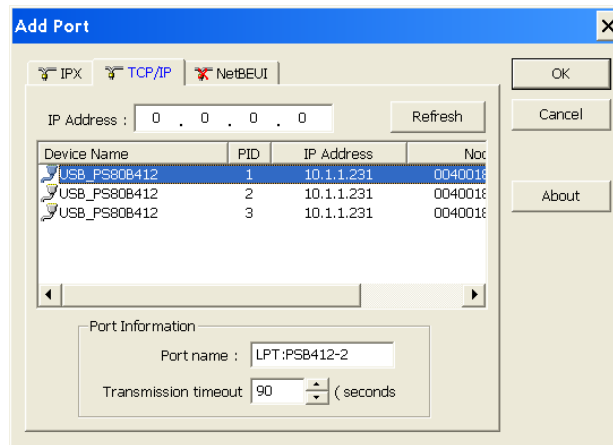
12. Select the **Network Print Port** and click **OK**.
13. The Add Port box will then appear, along with the Print Server's Node ID (*The last 6 digits of the Node ID, located on the back of the Print Server unit*). Select one printer server port from the list, which is now connected to (one of) your printer(s), as shown in the following picture.



**PID (1): Parallel, PID (2): USB 1, PID (3): USB 2**

- By default, the computer will first search for the Print Server(s) on the network by using the IPX/SPX protocol.
- If the IPX/SPX protocol is installed, the Print Server will be displayed along with its Node ID, as shown in Node column. *(The last 6 digits of the Node ID, located on the back of the Print Server unit).* Select one of the Print Server's ports from the list.
- If the IPX/SPX protocol is *not* installed, no Print Server will be shown in the display box. Then please select TCP/IP or NetBEUI alternatively.
- It starts again to search for the Print Server on the network by using the protocol you specify in the step above. When finished, the Print Server will be displayed along with its Node ID, as

shown in the following picture. *(The last 6 digits of the Node ID, located on the back of the Print Server unit).* Select one of the Print Server's ports from the list.



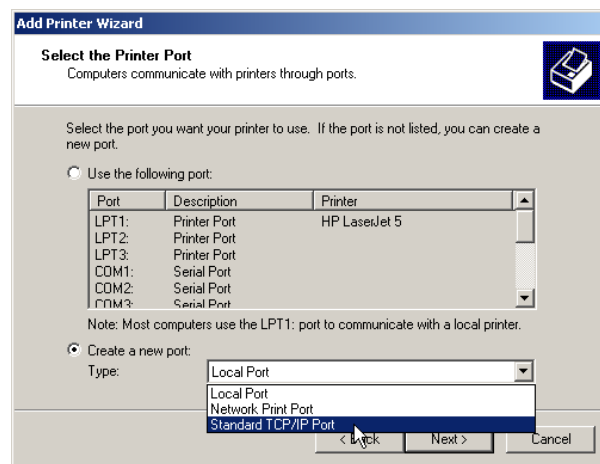
**lp1 : Parallel Printer / lp2: USB 1 Printer/ lp3: USB 2 Printer**

Once the appropriate printer port is selected for your first printer, please repeat the steps to install your second and third printers.

# Add Printers To Windows

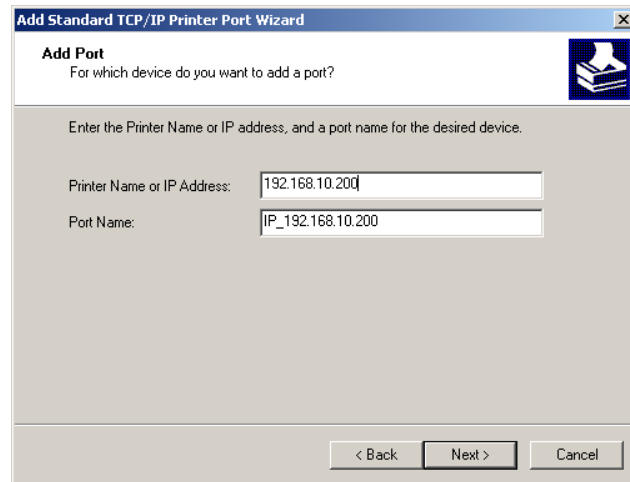
## 2000/XP

1. Click **Start**, point to **Settings**, and select **Printer**.
2. Run **Add Printer**, Click **Next**.
3. The Add Printer Wizard screen will appear, Select **Local Printer** and click **Next**.
4. From the type of **Create a new port** box as shown in the following picture, select the **Standard TCP/IP Port**, Click **Next** and **Next**.



5. The Add Standard TCP/IP Printer Port Wizard box will then appear as shown in the picture below. Type in the IP address

assigned to the Print Server in the ***Printer Name or IP Address*** box and Click **Next**.



**Add Port**  
For which device do you want to add a port?

Enter the Printer Name or IP address, and a port name for the desired device.

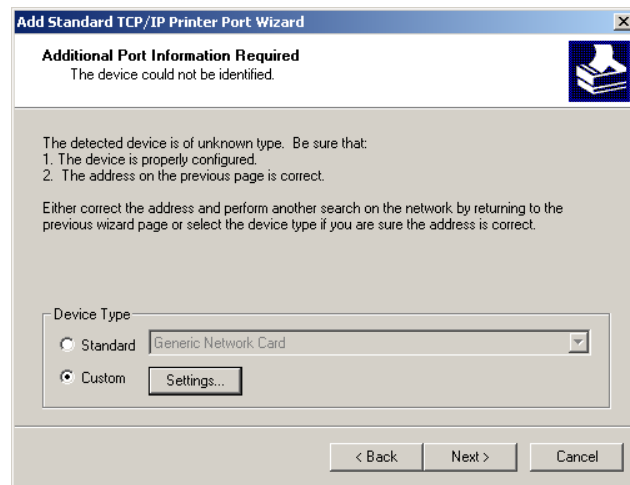
Printer Name or IP Address: 192.168.10.200

Port Name: IP\_192.168.10.200

< Back   Next >   Cancel

The port name can be changed (i.e., IP\_One, IP\_Two, IP\_Three) accordingly if you have a 3-port print server. So you can add a second port to the second printer, etc.

6. In the **Add Standard TCP/IP Printer Port Wizard** box as shown in the following picture, Select **Custom** and Click on the **Settings** button. Once finished, click **Next**.



7. In the **Configure Standard TCP/IP Port Monitor** box as shown in the picture above, select “custom device type” and then click **Next**.

Configure Standard TCP/IP Port Monitor

Port Settings

Port Name: IP\_192.168.10.200

Printer Name or IP Address: 192.168.10.200

Protocol

☐ Raw ☒ LPR

Raw Settings

Port Number: 9100

LPR Settings

Queue Name: lp1

☐ LPR Byte Counting Enabled

☐ SNMP Status Enabled

Community Name: public

SNMP Device Index: 1

OK Cancel

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Note: ***Please DO NOT type any other name than lp1, lp2 or lp3 in this step.***

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8. Type the correct printer port in the LPR Settings box under “QUEUE NAME.” (If your Printer is attached to the Parallel Port, type “**lp1**” If you are connecting your printer to the first



USB port on the top of the PS12U, type in “**lp2**” If you are connecting your printer to the second USB port, type “**lp3**” in the “Queue Name” box).

9. Click **OK**
10. Select the appropriate printer manufacturer and printer type list and click **Next**.
11. Type in a new **Printer name** or leave it with the default setting, and click the **Next** button.
12. A message will appear asking you to confirm your printer selection, “To confirm that the printer is installed properly... you can print a test page”. Select **Yes (Recommended)** and then click **Finish**.

## **Macintosh OS X Configuration**

Please follow these steps to install the PS12U on a Macintosh OS X computer.

1. Open your Macintosh HD on the Desktop, and click "Applications".
2. Click "Utilities".
3. Click "Print Center".
4. Press "Add...".
5. It shows the dialog box of the printer configuration.

## **AppleTalk**

To Configure via AppleTalk:

1. Select "AppleTalk" and "Local AppleTalk Zone". The computer will find the print server. You can select the suitable printer model for your printer, or select "Generic". **Don't select "Auto Select"!**
2. Press "Add".
3. Change the format for the printer you just added before printing, and then press "OK."

## **LPR**

To configure through LPR:

1. Select "IP Printing".
2. Printer's Address: Input the IP address of your print server. (For example: 192.168.1.200)

**Disable** Use default queue on server.

Queue Name: lp1, lp2, or lp3 (**fixed**)

( **lp1** : Parallel Printer / **lp2**: USB 1 Printer/ **lp3**: USB 2 Printer)

3. Select the suitable printer model for your printer, or select "Generic", and then press "Add".
3. Change the Format for the printer you just added before printing, and then press "OK."

# Configure Your Print Server

## from Web Browser

Before you can use the web browser to configure your PS12U, the Print Server requires an IP address. The PSAdmin utility can easily set an IP address with the Print Server.

Enter the IP address of the Print Server as the URL, for example, 192.168.10.132. Then the Print Server's System status page will appear.

## System Status



Click on **Printer**, to show the information of each printer connected to the Print Server.

Click on **TCP/IP**, to show the current TCP/IP setting.

Click on **NetWare**, to show the current Netware setting.

Click on **SNMP**, to show the current SNMP setting.

Click on **AppleTalk**, to show the current AppleTalk setting.

## Setup Wizard

### System Setup

Click on the **Setup Wizard**, and the System Setup Menu will appear.

The screenshot shows the 'USB Print Server PS12U' setup wizard. The top navigation bar includes 'Device Status', 'Setup Wizard' (highlighted), 'SYSTEM TOOLS', and 'Help'. A left sidebar lists 'SETUP SYSTEM', 'Printer', 'TCP/IP', 'NetWare', 'AppleTalk', 'SNMP', and 'Restart'. The main content area is titled 'System Settings' and contains the following fields: 'Device Name' (pre-filled with 'USB\_PS123407'), 'System Contact', 'System Location', 'Administrator's Password' (with 'Password' and 'Re-type Password' sub-fields), and a 'Save & Next' button at the bottom.

USB Print Server PS12U	
Device Status	Setup Wizard
SYSTEM TOOLS Help	
SETUP SYSTEM	This Menu allows you to configure general system settings of the Print Server. Click "Save and Next" to continue.
SYSTEM	System Settings
Printer	Device Name : <input type="text" value="USB_PS123407"/>
TCP/IP	System Contact : <input type="text"/>
NetWare	System Location : <input type="text"/>
AppleTalk	Administrator's Password
SNMP	Password : <input type="text"/>
Restart	Re-type Password : <input type="text"/>
	<input type="button" value="Save &amp; Next"/>


**Device Name:** Device name of the Print Server.

**System Contact:** Contact name of the Print Server.

**System Location:** Location name of the Print Server.

**Password:** This option allows you to input setup password of the Print Server.

**Re-type Password.**



Please type your user name and password.

Site: 192.168.10.201

Realm: PtnServr

User Name

Password

☐ Save this password in your password list

OK Cancel

**User Name:** You must input the default administration user name, **admin** as login user name.

**Password:** The default password is blank. You should remember this

password.

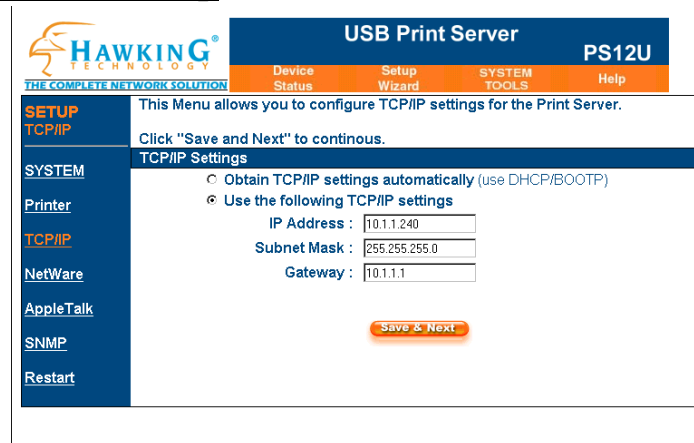
Click “Next” to configure Printers.

## **Printer Setup**

**Bi-directional:** This option allows you to select the bi-directional function of the print server. There are two settings available: **Disable** or **Auto Detect**.

Click “Next” to configure TCP/IP.

## **TCP/IP Setup**



The screenshot shows the configuration interface for the USB Print Server PS12U. The top navigation bar includes 'Device Status', 'Setup Wizard', 'SYSTEM TOOLS', and 'Help'. The left sidebar lists 'SETUP TCP/IP', 'SYSTEM', 'Printer', 'TCP/IP', 'NetWare', 'AppleTalk', 'SNMP', and 'Restart'. The main content area is titled 'TCP/IP Settings' and contains the following text: 'This Menu allows you to configure TCP/IP settings for the Print Server. Click "Save and Next" to continue.' Below this, there are two radio button options: 'Obtain TCP/IP settings automatically (use DHCP/BOOTP)' and 'Use the following TCP/IP settings'. The second option is selected. Under the selected option, there are three input fields: 'IP Address' with the value '10.1.1.240', 'Subnet Mask' with the value '255.255.255.0', and 'Gateway' with the value '10.1.1.1'. A 'Save & Next' button is located at the bottom right of the configuration area.

**DHCP/BOOTP:** The Print Server obtains IP-related settings automatically from your DHCP server.

**IP Address:** This option allows you to input IP address from the Print

Server. The IP address must meet the IP addressing requirements of the network segment.

**Subnet Mask:** This option allows you to input the subnet mask from the Print Server.

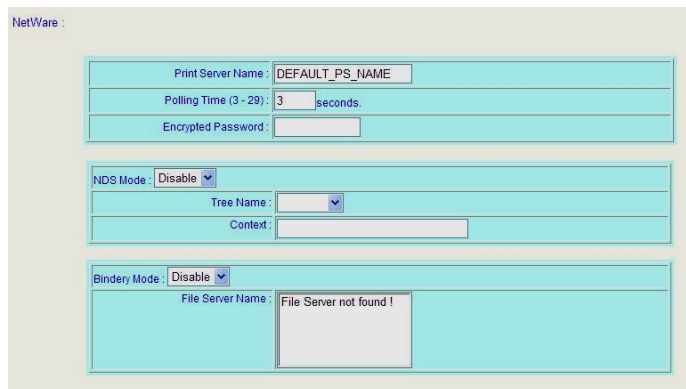
**Gateway:** This option allows you to input gateway from the Print Server. The IP address of gateway must meet the router or gateway to go across of the network segment.

*Click Next to configure Netware Protocol or Click Save & Restart to reboot your Print Server.*



## NetWare Setup

1. Log into your NetWare file server as a Supervisor (Admin.) or equivalent.
2. Select NetWare and type in the Print server that was created during PCONSOLE. Select the NetWare File Server that the print server device will be attached to.
3. Click **Setup** to bring up the sub-menu.
4. Click on **NetWare**.



The image shows a screenshot of the NetWare Setup dialog box. It has a title bar that says "NetWare :". The dialog is divided into three main sections. The first section contains three fields: "Print Server Name:" with the value "DEFAULT\_PS\_NAME", "Polling Time (3 - 29):" with the value "3" and the unit "seconds", and "Encrypted Password:" with an empty field. The second section contains a dropdown menu for "NDS Mode" set to "Disable", a "Tree Name:" dropdown menu, and a "Context:" text field. The third section contains a dropdown menu for "Bindery Mode" set to "Disable" and a "File Server Name:" field with the text "File Server not found !".

**Print Server Name:** This option allows you to input the print server name which is configured by the PSAdmin utility or PCONSOLE program.

**Polling Time:** The time interval in which the print server unit polls the file server for servicing of print queues.

**Encrypted Password:** This option allows you to input encrypted password from the print server. The print server login to NetWare server that administrator set password from selected print server.

**NDS Mode:** To Enable NDS Mode, if you want to setup NDS environment. To select **Tree Name** of NetWare then input context name in the **Context** box.

**Bindery Mode:** To Enable Bindery Mode, if you want to setup Bindery environment. To select **File Server Name** of NetWare.

## Installing Print Server on NetWare 4.x/5.x

Due to its architecture and functionality, the print server must work under NetWare 4.x/5.x NDS Bindery Emulation. When you install the NetWare file server for the first time, by default, the installation program will automatically set up the **Bindery Emulation** function for you by adding “SET BINDERY CONTEXT =” in the AUTOEXEC.NCF file. By default, the bindery context will only be set on your organization (O) object.

*If you have ever modified this line, or if you have ever added any organization units (OU) to your NDS tree after the NetWare system was installed, please read the following section before you install the print server.*

# Installation Procedure

1. At your file server console, type “**load install**”.
2. Select “**NCF files options**”.
3. Select “**Edit AUTOEXEC.NCF file**”.
4. Add or Modify the “**SET BINDERY CONTEXT =**” line to include the NDS organization (O) and all organization unit (OU) objects where users are located. For example: SET BINDERY CONTEXT = O=ABC; OU=SALES.OU=ABC-USA.O=ABC; OU=TECH.OU=ABC-USA.O=ABC ;
5. When done, save the new **AUTOEXEC.NCF** file. Please restart your NetWare file server in order for new settings to take effect immediately.
6. Next, please refer to “**Auto Setup**” section in this chapter to finish installing your print server.
7. Log into your NetWare file server as a Supervisor (Admin.) or equivalent *via a Bindery connection*.
8. Run NetWare’s PCONSOLE and add users to the “**Queue Users**” list.

9. From your NetWare client computer, such as Windows 95/98/Me, create a printer that is connected (redirected) to the NetWare print queue serviced by the print server.

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Note: **Please refer to NetWare's Print Server/Services manuals for detailed PCONSOLE commands.**

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## SNMP Setup

TCP/IP networks use a standard management protocol called *Simple Network Management Protocol* (SNMP). SNMP is widely used in the industry as a solution for remote network management and monitoring of networking devices. SNMP actually includes a protocol, a database structure specification, and a set of database objects. The database objects are contained in a standard database called *Management Information Base* (MIB) that is stored on the networking device called *SNMP agent*. The print server's SNMP implementation runs in a TCP/IP environment.

A host on the network running Network Management System (NMS) software can access the print server device by reading and writing the MIB objects stored in the device. The Network Management Systems are available from many third-party vendors, such as Hewlett-Packard's OpenView.

When accessing (traversing) MIB objects in the print server using NMS software called *SNMP manager*, you need to provide a *community name* in each SNMP request for authentication purpose. The print server supports up to two community names. The default community name is *public* (case-sensitive), with *Read Only* access right in default.

When an unusual condition or activity occurs, the SNMP agent alerts the SNMP manager through *SNMP traps*. Following list

summaries SNMP trap messages that the print server will send out.

Activities/SNMP Trap Messages	Description
<b>Link Up or Link Down</b>	When the network interface on the print server fails, a link down trap message is generated; if the network interface comes back to life, a link up trap message is sent.
<b>Cold Start or Warm Start</b>	When the print server restarts, the cold start or warm start trap message is generated.
<b>Authentication Failure</b>	When the print server received a SNMP request with a community name that does not match the community name the print server is configured with (stored in the print server's memory), an authentication failure trap message is generated.

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In the print server's SNMP implementation, the following MIB objects are available for updating.

MIB Object Names	Description
<b>system.sysContact</b>	Indicates the network administrator's name.
<b>system.sysName</b>	Indicates the print server's name for identification.
<b>system.sysLocation</b>	Indicates the location of the print server.
<b>snmp.snmpEnableAuthenTraps</b>	Enables or disables the function of sending SNMP Authentication Failure trap message to the network administrator, if the community name within a SNMP request is not correct.



Users can set up print server's SNMP functions by using their browsers.

1. Click **Setup** to appear in the sub-menu.
2. Click on **SNMP**

SNMP :

SNMP Communities :	
Support HP WebJetAdmin :	Disable ▼
Community 1 :	public Read-Only ▼
Community 2 :	public Read-Only ▼

SNMP Traps :	
SNMP Traps :	Disable ▼
Authentication Traps :	Disable ▼
Trap 1 IP :	0.0.0.0
Trap 2 IP :	0.0.0.0

**SNMP Community:** The print server supports up to two community names. The default community name is *public* (case-sensitive), with *Read Only* access right in default.

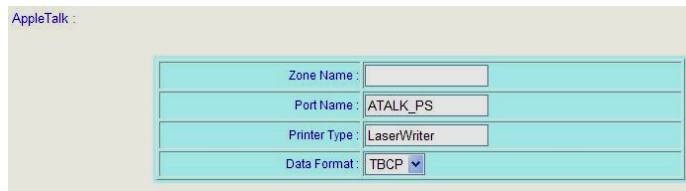
**Support HP WebJetAdmin:** This option allows user determine to disable/enable the Support HP WebJetAdmin.

**SNMP Traps:** Enable the function of sending SNMP Authentication Failure trap message to the network administrator, if the community name within a SNMP request is not correct.

# AppleTalk Setup

The print server can print jobs submitted from Macintosh workstations connected via Ethernet using AppleTalk protocol. The basic configuration is for the print server in an AppleTalk environment is performed simply by opening the **Chooser** window and selecting a printer that is connected to the print server.

1. Click **Setup**; it will then appear in the sub-menu.
2. Click on **AppleTalk**



The screenshot shows a window titled "AppleTalk :". Inside the window is a light blue rectangular box containing four configuration fields:

Zone Name:	<input type="text"/>
Port Name:	ATALK_PS
Printer Type:	LaserWriter
Data Format:	TBCP ▼

3. **Zone Name:** In this option, type an AppleTalk Zone name that you want the print server to belong to or leave it in default (*This enables the print server to automatically search and link itself to the default zone that is set on the AppleTalk router, if found*). This assumes that at least one AppleTalk Zone exists on the network. If no zone exists, the print server itself displays the zone name as an

asterisk (\*) in the current **AppleTalk Status** of the print server in the web browser.

4. **Port Name:** In this option, type a name for identification purposes or just leave it as default (**recommended**).

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**Note:** The default print server's Chooser name is shown as follows:

<**ATALK\_PS**>-xxxxxx-1, where xxxxxx represents the last six digits of the device's Node ID. For example: ATALK\_PS-40EEED-1. You may also change the <**ATALK\_PS**> to a name you like for identification purposes in this option. The print server will append the last six digits to the name you specify.

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5. **Printer Type:** LaserWriter is the default selected printer type (recommended).

**Data Format:** In this option, data format includes **ASCII**, **TBCP** and **BCP**.

# Internet Printer Connection and HP Web JetAdmin

## IPP Overview

The PS12U supports the Internet Printing Protocol (IPP). You can use this protocol to access your printer over the Internet as long as you configure your IPP gateway correctly on any Windows 2000 or XP client. Using the appropriate software on your system, you can create an IPP print path from your Windows PC system over the Internet to access your PS12U from a remote location.

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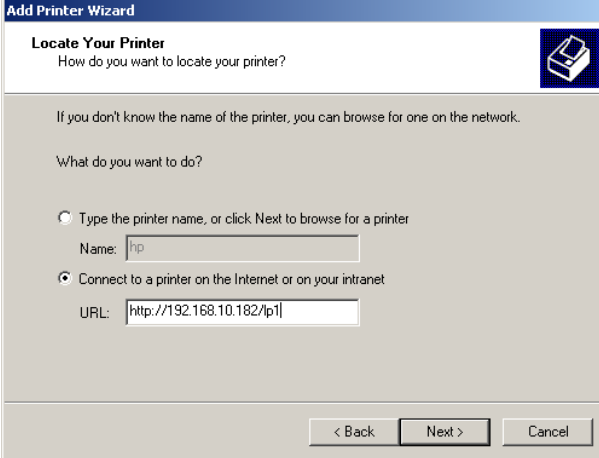
**Note:** For incoming print path requests, the network administrator must configure the firewall to accept incoming IPP requests from clients outside of the network.

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### **IPP Printing Over Windows 2000 and XP**

To install Windows 2000/XP IPP service you must follow the installation steps below:

1. Click the **Start** button.
2. Select Settings, and then select the “**Printers**” option.
3. Click on the **Add Printer** icon. The add printer wizard welcome screen will appear, then Click **Next**.
4. Select the **Network printer** option, and then click “**Next**”.
5. Select **Connect to a printer on the Internet or on your intranet** option.



The screenshot shows the 'Add Printer Wizard' window with the title bar 'Add Printer Wizard'. The main heading is 'Locate Your Printer' with the subtext 'How do you want to locate your printer?'. There is a printer icon in the top right corner. The text says: 'If you don't know the name of the printer, you can browse for one on the network.' followed by 'What do you want to do?'. There are two radio button options: 'Type the printer name, or click Next to browse for a printer' (which is unselected) and 'Connect to a printer on the Internet or on your intranet' (which is selected). Below the first option is a text box labeled 'Name:' containing 'lp'. Below the second option is a text box labeled 'URL:' containing 'http://192.168.10.182/lp1'. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

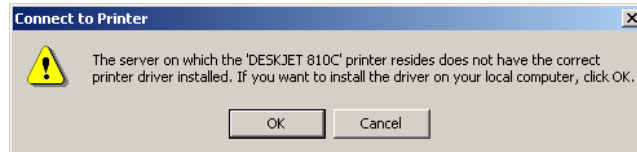
6. In the URL box, type in the print server's IP address, for example, http://192.168.10.182/lp1.

Then Click **Next**.

**\*\* Remember to add “lp1, lp2, or lp3” after the IP address to correlate to the printer on the PS12U that you would like to print to.**

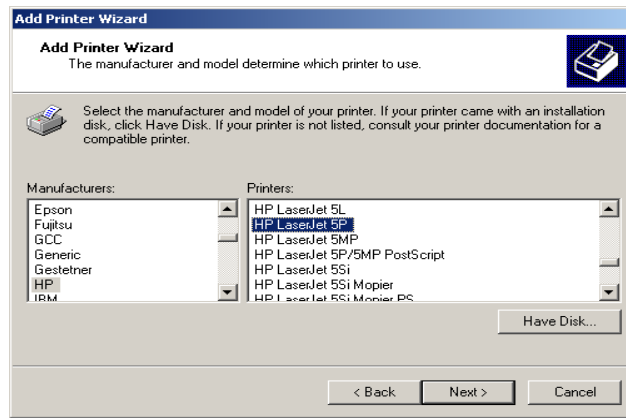
**( lp1 : Parallel Printer / lp2: USB 1 Printer/ lp3: USB 2 Printer)**

7. Windows will check to see if you have the appropriate driver installed, if not, you will receive the following message:

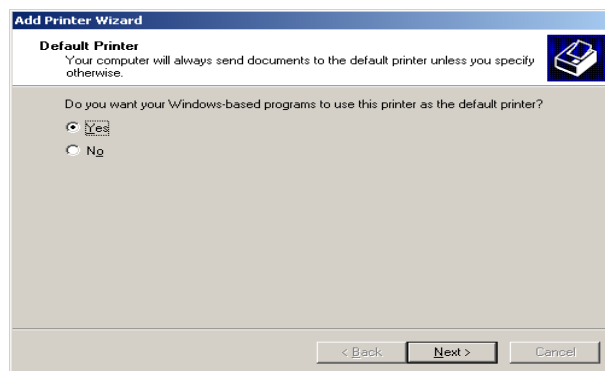


Then Click **OK**.

8. Select the appropriate printer manufacturer and printer type and click “**Next**”.



9. If you want your Windows-based programs to use this printer as the default printer, please select “**Yes**”, and Click **Next**.



10. Click the Finish button.
11. You have just set up IPP printing on your computer!

# Firmware Upgrading

## Upgrading from your Browser


1. Enter the IP address of the Print Server as the URL.
2. Click **System Tools**, and then choose **Upgrade From Browser**, as shown in the following picture:

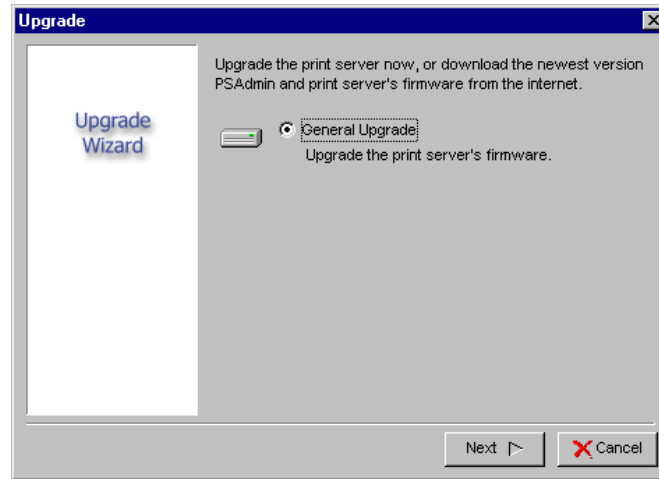


3. Click **Browse** and select the firmware file.
4. Click **Upgrade**.



## Upgrade from PSAdmin

1. Click the **Upgrade** button , as shown in the following picture:



2. Select **General Upgrade**. Make sure that the upgrade file is located in the same directory as PSAdmin. The upgrade filename is **mps\*.bin** (USB Print Server).

## Question A

*Print jobs are sent to the print queue successfully, but fail to be sent to the printer.*

### Possible explanations

1. The Print server Name/Print Queue configuration in PCONSOLE is incorrect.
2. The Print server name specified and stored in the print server memory doesn't match the same one set in PCONSOLE.
3. The network cable or power adapter connected to the print server is loose or disconnected.
4. The printer is off-line, jammed, or out of paper.

## Solutions

1. Check all the information in PCONSOLE.
2. Check all the information of the print server by running PSAdmin.
3. Check to see that if the network cabling and power adapter are properly connected.
4. Recheck the print server connection by running the PSAdmin. It should read "Connected."

## **Question B**

*Print jobs start printing, but print very slowly or print unknown characters.*

### Possible explanation and solution

A printer driver is missing or is incompatible with that printer. Using a print driver that is not specific for the printer can cause printing errors. Install the proper printer driver. If these printer drivers are not available to you, please contact your printer manufacturer.

Try disabling bi-directional printing. This can be achieved through the print server's setup function. Bi-directional capable printers may cause a conflict with the PS12U.

### **Question C**

*The upgrading process indication bar stops and does not seem to proceed again while upgrading the print server.*

#### Possible Explanation

There might be a network problem. This causes the upgrading procedure to fail.

#### Solutions

1. Check the network cabling, especially from the workstation running the PSAdmin to the print server unit.
2. Run the PSAdmin and upgrade the print server again.

### **Question D**

*The Status LED light keeps blinking after POST.*

Possible explanation and solution

The last upgrade process was not completed. The print server must be upgraded again by using the PSAdmin. Please see the manual located on the installation CD for more details.

### **Question E**

The PSAdmin reports “Create Print server Error”, “Create Printer Error”, or “Create Print Queue Error” while using Auto Setup.

Possible Explanation

The print server name, the printer name, or the print queue name you specified in the **Auto Setup** dialogue box contains a space.

#### Solution

Check to see if there is a space in the print server name, the printer name, or the queue name. Type in a new name without a space between two characters or replace a space by a dash (-) or an underscore (\_).

### **Question F**

The PSAdmin reports “Print server Already Exists”, “Printer Already Exists”, or “Print Queue Already Exists” after specifying the print server name, or the print queue name in Auto Setup.

#### Possible Explanation

A same print server name or queue names exists in the specific NetWare file server as the one you specified in the **Auto Setup** dialogue box.

#### Solution

Specify a new print server name or queue name in the **Auto Setup**.



### **Ethernet**

A networking standard using cables (Category 5) to create a network.

### **IPP**

Internet Printing Protocol. IPP allows you to print your documents over an Internet connection to another printer over the net.

### **Network Adapter**

Also known as a NIC (Network Interface Card). Used to provide PC's or laptops with an Ethernet port or wireless access to the network.

### **Broadband Modem**

A device that allows broadband connection to the internet. Broadband connections include speeds faster than 56k (dial up modem speed). The two most common types of Broadband connections are DSL and Cable. Cable modem relies on the bandwidth of cable television lines while DSL modems rely on the telephone lines operating at DSL speeds.

### **Router**

A device used to share Internet access from one user to multiple users. By taking one

IP address (Addresses used by ISP's to assign broadband services to your computer) the

Router distributes the services of your broadband access among multiple users and IP's.



[illegible]



[illegible]



[illegible]



[illegible]

